

# CAL-ROYAL PRODUCTS, INC.

## PIONEER - Series

### Instructions For Installing SL-Series Lever Handle Sets

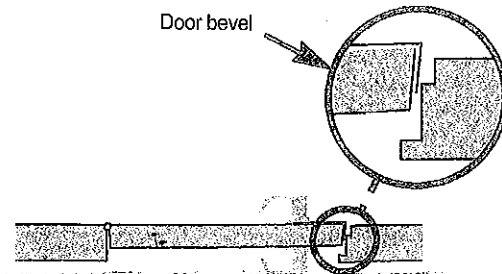
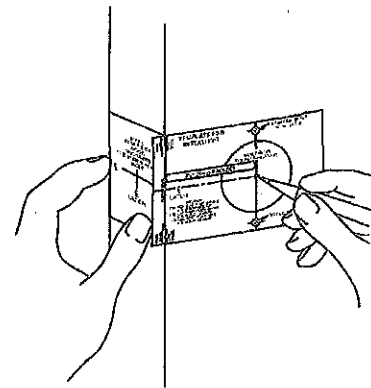
**NOTE:** Accurate door preparation is essential for proper functioning of this lock. Follow template and instructions carefully.

**SL SERIES ARE PACKED UNASSEMBLED INSIDE BOX FOR CONVENIENCE & QUICK INSTALLATION**

**Through-Bolts are provided and recommended for use on high frequency doors.**

The anti-sagging mechanism of handle in SL-series lever handle set has a patent pending in the U.S. and foreign countries.

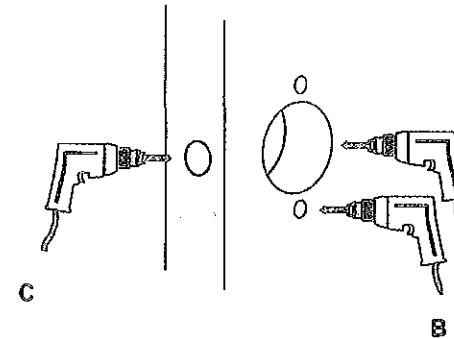
### Door and jamb preparation



#### 1. Mark door

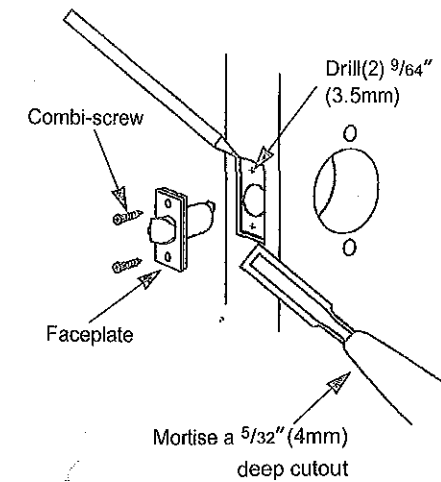
- Check lock for proper backset and body outside through-bolt type before marking.  
**NOTE:** Through-Bolts are provided and recommended for use on high frequency door.
- Detach stub.
- Fold template at correct marking for door bevel (high or low bevel, or flat).
- Position template at correct height (recommended height for centerline is 38" (97cm) from floor).
- Mark center for 2 1/8" (54mm) hole.
- Also mark for (2) 5/16" (8mm) holes for through-bolt type.  
**NOTE:** Do not mark (2) 5/16" holes for locks No through-bolt type.
- Use stub to mark center of door thickness.  
**HINT:** For retrofitting existing lock holes, fold template in half to position for the mounting screws.

#### 2. Drill holes



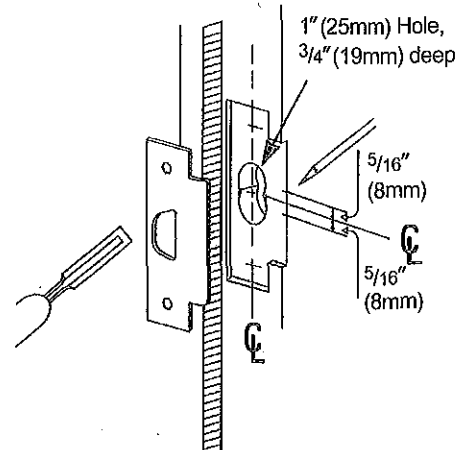
- Drill a 2 1/8" (54mm) hole through door (from both sides to avoid damaging door).
- Drill (2) 5/16" (8mm) holes for through bolt  
**NOTE:** Do not drill the (2) 5/16" (8mm) holes for locks No through-bolt type
- Drill a 1" (25mm) or 7/8" (22mm) (depending on latch housing diameter) in door edge.

#### 3. Install latch

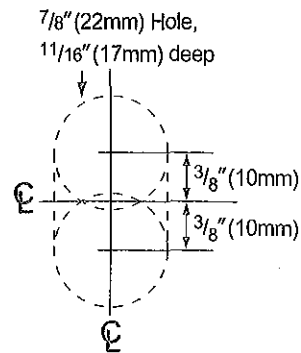


- Insert latch into hole. Trace around faceplate.
- Chisel out wood until faceplate fits flat with door edge.
- Drill (2) 9/64" (3.5mm) holes and secure latch unit with combi-screws supplied.
- Fasten latch to door so that beveled side of latchbolt faces jamb.

#### 4. Install strike



ASA Strike - Standard



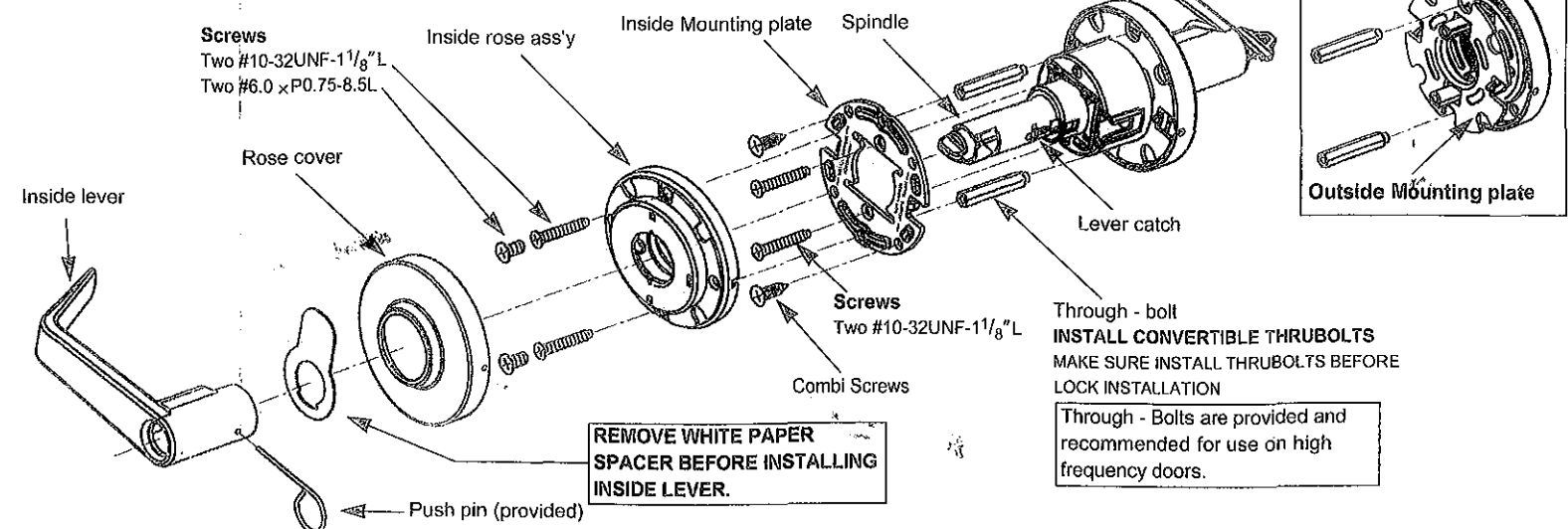
T Strike

- Mark vertical line and heightline on jamb exactly opposite center of latch hole.
- Drill (2) 1" (25mm) holes, 3/4" (19mm) deep, 5/16" (8mm) above and below heightline.
- Use strike plate to pattern for cutout. Clean out hole and install strike.

- Mark vertical line and heightline on jamb exactly opposite center of latch hole.
- Drill (2) 7/8" (22mm) holes, 1 1/16" (17mm) deep, into doorjamb as shown.
- Mortise a cutout for the strike. Use strike as a pattern for the mortise.  
(Strike should fit flush with the doorjamb.)

### Lock Installation

Must use "M6.0 x P0.75-8.5L" If thru bolts is not installed.  
Must use "#10-32UNF-1 1/8" L" (packed with convertible thru bolt) in installing convertible thru bolt.



- Disassemble inside lever.
- Disassemble inside rose assembly.
- Disassemble inside mounting plate.

#### 5. Disassemble inside trim

- Insert the convertible thrubolts (provided 2pcs additionally) into the tapping holes for convertible thrubolts in the outside rose ass'y.

**REMOVE WHITE PAPER SPACER BEFORE INSTALLING INSIDE LEVER.**

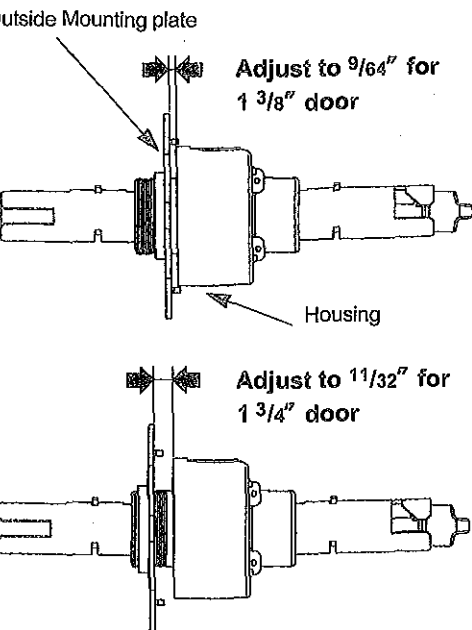
**Through-bolt INSTALL CONVERTIBLE THRU BOLTS MAKE SURE INSTALL THRU BOLTS BEFORE LOCK INSTALLATION**

Through-Bolts are provided and recommended for use on high frequency doors.

## Adjust for door thickness

**LOCKSET IS FACTORY PRESET FOR 1 3/4" (45mm) DOORS.**

See step 6. to center chassis in door or to change adjustment of other door thicknesses.



It can be adjusted for door thickness range from 1 3/8" to 1 3/4"

For adjustment of door thickness, follow step 11, then :

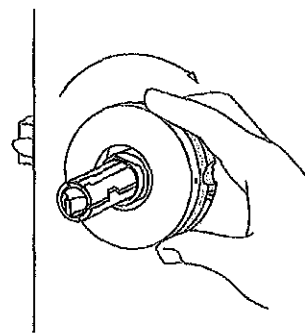
**A.** Adjust outside mounting plate for proper door thickness. At final position, the screw post hole must be in line with holes in lockbody.

**B.** Slide outside rose ass'y with rose cover onto spindle with the wider notch at inside diameter in line with lever catch. The screw posts will enter the holes pre-aligned between outside mounting plate and lockbody.

**NOTE :** See Step 11. must be done if you have to make adjustments for door thickness

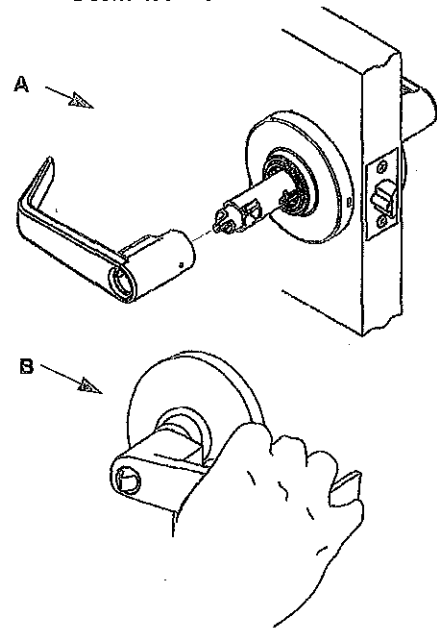
## ADJUSTMENT FOR DOOR THICKNESS

## Install inside rose assembly



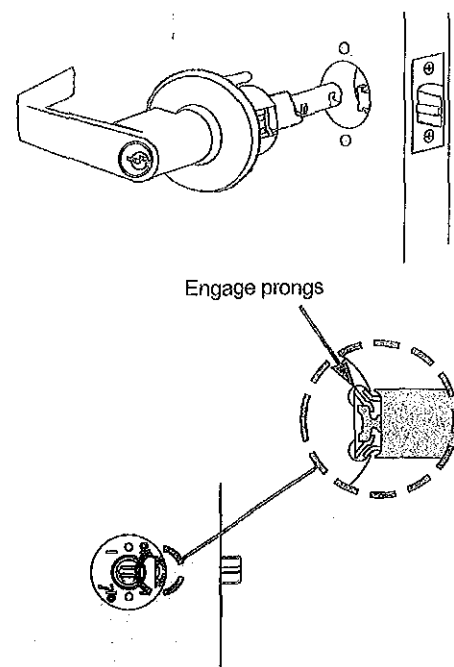
Align dimples on rose with grooves in inside rose assembly.  
Place rose against door and rotate clockwise until dimples snap into slots next to the grooves.

## 10. Install inside lever



**A.** Slide inside lever onto spindle. Push lever completely into place. (Pull on lever to make sure that catch is fully engaged.)  
**B.** Test operation of lock to make sure you have followed instructions correctly.

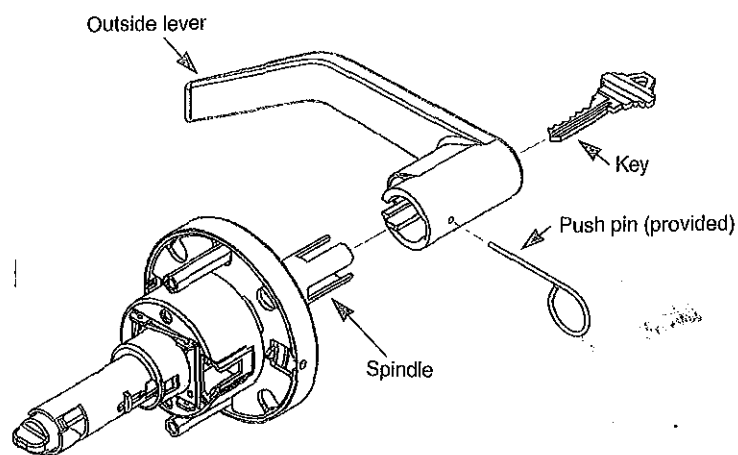
## 7. Install outside lock unit



**IMPORTANT :** Place outside lock unit into position. Make sure that latch prongs engage chassis housing, and latch retractor engages latch bar.

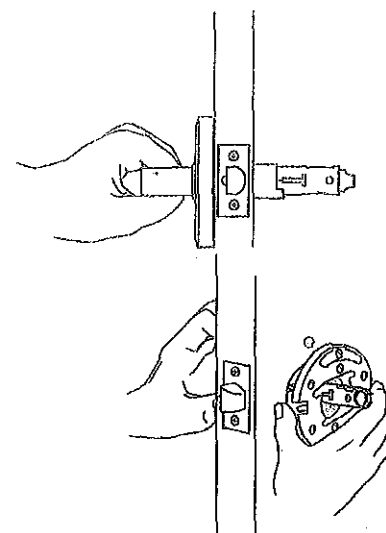
## How to remove & reassemble outside lever

### 11. Remove outside lever

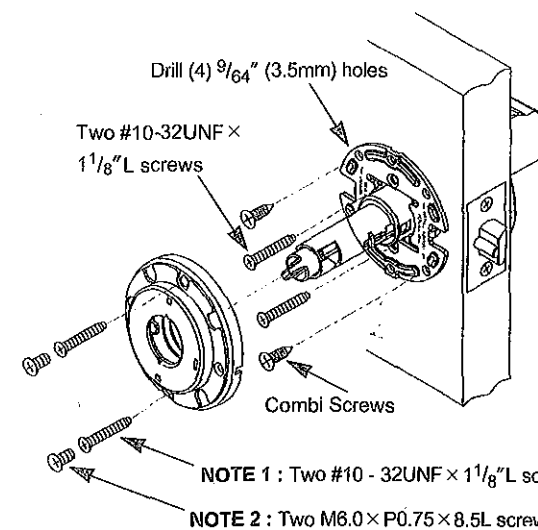


**A.** Insert key into cylinder. Insert push pin (or similar tool) into hole in lever. Turn key one - quarter turn and push tool (push pin) to depress lever catch. Slide the lever from spindle.

## 8. Install Mounting plate.



**CAUTION :** When using power screwdriver for installation, set to minimum torque setting.



**A.** Hold outside unit in place.  
**B.** Put mounting plate into position on chassis.  
**C.** Place mounting plate. Tighten it to lock body with two #10 - 32UNF x 1 1/8" L screws  
**D.** Drill (4) 9/64" (3.5mm) holes and secure the mounting plate with four combi-screws supplied.  
**THIS MUST BE DONE TO FIRMLY ANCHOR LOCK TO DOOR**  
**E.** Place inside rose ass'y. Tighten it to lock body with screws supplied.

**NOTE 1 :** Two #10 - 32UNF x 1 1/8" L (★) screws can be used for outside through - bolt type only.

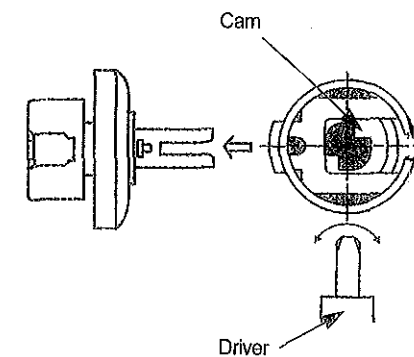
**NOTE 2 :** Two M6.0 x P0.75 x 8.5L screws can be used for no through - bolt type only.

## 12. Reassemble outside lever

Reverse Step 11 to reassemble levers.

**A.** To reassemble. Put a cylinder and key in lever.  
**B.** Push cylinder further in until it engages retractor.  
**C.** Turn key 90° clockwise and hold a key.  
**D.** Depress lever catch and push lever (Not key) in until it clicks then release a key.

## CAUTION FOR CLASSROOM FUNCTION



Make sure to turn cam anti - clockwise by driver as far as it will go before reassembling of cylinder to prevent mis-positioning of cam for classroom function.

**NOTE :** Do not make the holes for locks without outside through-bolt type

